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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/885,069	06/21/01	ISODA Y	Q64937

MMC2/1004
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EXAMINER	
HO, A	
ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 10/04/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/885,069	ISODA et al.	
	Examiner	Art Unit	
	Allen C. Ho	2882	

-- Th MAILING DATE of this communication appears on th cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *60,66,126 and 132* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *60,66,126 and 132* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. The disclosure is objected to because of the following informalities:

Page 233, line 5, "350" should be replaced by --390--.

Appropriate correction is required.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the term "surface light source" is not mentioned in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 60 and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saotome (U. S. Patent No. 5,038,037) in view of Nakamura *et al.* (U. S. Patent No. 5,427,858).

Saotome disclosed a radiation image read-out method and apparatus, comprising: (i) a line light source (**621**) for linearly irradiating stimulating rays onto an area of a front surface

(**402B**) of a stimulable phosphor sheet (**402B**, **405**, **402B'**), on which a radiation image has been stored, the stimulating rays causing the stimulable phosphor sheet to emit light in proportion to an amount of energy stored thereon during its exposure to radiation; (ii) a line sensor (**623**) for receiving light, which is emitted from the linear area of the front surface (**402B**) of the stimulable phosphor sheet exposed to the linear stimulating rays or from a linear area of a back surface (**402B'**) of the stimulable phosphor sheet corresponding to the linear area of the front surface of the stimulable phosphor sheet, and performing photoelectric conversion of the received light, the line sensor comprising a plurality of photoelectric conversion devices (**623A**, **623B**) arrayed along a length direction of the linear area of the stimulable phosphor sheet; (iii) scanning means (**440**) for moving the stimulable phosphor sheet with respect to the line light source and the line sensor and in a direction different from a length direction of the linear area of the stimulable phosphor sheet; and (iv) reading means (**626**) for successively reading outputs of the photoelectric conversion devices of the line sensor in accordance with the movement.

However, Saotome did not teach that the line light source is constituted of an organic EL device.

Nakamura *et al.* disclosed that organic EL devices have many advantages such as lower driving voltages and different light emission could be obtained by changing the kinds of organic solids forming the light-emitting layer (column 1, lines 32-47).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ an organic EL device as a line source in view of the aforementioned advantages.

6. Claims 66 and 132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saotome (U. S. Patent No. 5,038,037) in view of Nakamura *et al.* (U. S. Patent No. 5,427,858) and Gilblom *et al.* (U. S. Patent No. 5,747,825).

Saotome disclosed a radiation image read-out method and apparatus, comprising: (i) a line light source (**621**) for linearly irradiating stimulating rays onto an area of a front surface (**402B**) of a stimulable phosphor sheet (**402B**, **405**, **402B'**), on which a radiation image has been stored, the stimulating rays causing the stimulable phosphor sheet to emit light in proportion to an amount of energy stored thereon during its exposure to radiation; (ii) a line sensor (**623**) for receiving light, which is emitted from the linear area of the front surface (**402B**) of the stimulable phosphor sheet exposed to the linear stimulating rays or from a linear area of a back surface (**402B'**) of the stimulable phosphor sheet corresponding to the linear area of the front surface of the stimulable phosphor sheet, and performing photoelectric conversion of the received light, the line sensor comprising a plurality of photoelectric conversion devices (**623A**, **623B**) arrayed along a length direction of the linear area of the stimulable phosphor sheet; and (iii) reading means (**626**) for successively reading outputs of the photoelectric conversion devices of the line sensor in accordance with the movement.

However, Saotome did not teach that: (1) the light source is a surface light source constituted of an organic EL device; and (2) the sensor is an area sensor.

Nakamura *et al.* disclosed that organic EL devices have many advantages such as lower driving voltages and different light emission could be obtained by changing the kinds of organic solids forming the light-emitting layer (column 1, lines 32-47). Furthermore, organic EL devices

could be used as a surface light source (column 3, lines 22-26). Gilblom *et al.* disclosed an image read-out apparatus comprising a CCD area sensor.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ an organic EL device as a light source in view of the aforementioned advantages. Furthermore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a surface light source with an area sensor for reading the image data, since a person would be motivated to reduce the time it takes to read in the data.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) Arakawa (U. S. Patent No. 6,072,855) describes a method and apparatus for acquiring image information for energy subtraction processing comprising an EL panel.

(2) Elkind *et al.* (U. S. Patent No. 5,965,897) describe a high-resolution storage phosphor x-ray imaging device comprising a CCD array.

(3) Arakawa (U. S. Patent No. 5,028,783) describes a shading elimination method for an image read-out apparatus comprising an EL linear light source.

(4) Arakawa *et al.* (U. S. Patent No. 4,883,961) describe a radiation image recording and read-out apparatus comprising a line light source and a line sensor.

(5) Ohyama *et al.* (U. S. Patent No. 4,767,927) describe an apparatus for reading radiation image information stored in imaging plate, comprising a line light source and a line sensor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (703) 308-6189. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached at (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Allen C. Ho
Examiner
Art Unit 2882

ACH
September 20, 2001

ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800